



South Carolina Department of Health  
and Environmental Control

Waterlee Environmental Quality Control District  
Magnolia Street P.O. Box 1628  
Sumter, SC 29150 Sumter, SC 29151  
(803) 778-1531 (803) 778-6548 Fax (803) 773-6366

Serving  
Clarendon, Kershaw, Lee,  
and Sumter Counties

## Wastewater System Construction APPROVAL TO PLACE INTO OPERATION

Date: February 22, 2001

**Issued to:** Wyboo Plantation  
ATT: Bill Gregory  
317 Plantation Drive  
Manning, SC 29102

*for the operation of the permitted system referenced below:*

**Permit Number:** 24,638-WW  
**Project Name:** Wyboo Plantation Block D & Block L  
**County:** Clarendon

**Project Description:** Installation of approximately 7170 LF of 3" force main and 49 septic tanks effluent pumping system (STEP) to serve lots 1-37 Block L and lots 51-62 Block D.

**Permitted Flow:** 21,400 gpd **WWTP:** Wyboo Plantation (ND0072427)

**Special Conditions:** None

This approval is based on the Engineer's letter of certification signed by William A. Timmons, P.E., S.C. Registration No. 9429.

  
Jack P. Pettit, P.E.  
Waterlee EQC District Engineer

cc: Bureau of Water, Water Facilities Permitting Division ✓  
William A. Timmons, P.E.  
Brad Collier, Dir. Environmental Health



## Wastewater Construction Permit

### Bureau of Water

Permission is hereby granted to: Wyboo Plantation  
Attn Bill Gregory  
317 Plantation Dr  
Manning, SC 29102

for the construction of a sanitary sewer system in accordance with the construction plans, specifications engineering report and the Construction Permit Application signed by William A. Timmons, Registered Professional Engineer, S.C. Registration Number: 9429.

Project Name: WYBOO PLANTATION BLOCK D & BLOCK L  
Location: Lake Arbu Dr

County: Clarendon

Project Description: Approximately 8,380 LF of 3" force main and 49 septic tank effluent pumping (STEP) systems to serve 49 residential lots.

The wastewater will be discharged to the WYBOO PLANTATION/PHASE II treatment facility, (ND Permit NDO072427) at a design flow rate of 21400 gallons per day.

Special Conditions - (See Back of Construction Permit for Continuation):

1. An audible and visible high water alarm must be provided for each STEP unit.
2. Ductile iron force main must conform to ASTM A-377, latest revision and must be installed in accordance with AWWA C-600, latest revision.
3. PVC force main must be installed in accordance with ASTM D-2321 of ASTM D-2774, latest revision.
4. Sewer force mains in relation to water mains must be in accordance with Regulation 61-67.

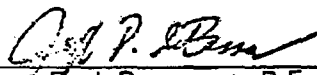
In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

*This is a permit for construction only and does not constitute State Department of Health and Environmental Control approval, temporary or otherwise, to place the system in operation. An Approval to Place in Operation is required and can be obtained following the completion of construction by contacting the EQC Wateree District Office at (803) 778-1531. Additional permits may be required prior to construction (e.g., stormwater).*

Permit Number: 24,638-WW

Date of Issue: August 26, 1999

Expiration Date: Construction must begin prior to August 25, 2001 and be completed prior to August 25, 2002, or this permit will expire.

  
Jeffrey P. deBessonnet, P.E., Director  
Water Facilities Permitting Division

GBA(c)



# CONSTRUCTION PERMIT APPLICATION

## Water and/or Wastewater Facilities

# BUREAU OF WATER

SELECT ONE: ☐ Water Facilities ☐ Wastewater Facilities ☒ Water & Wastewater Facilities

I. Project Name: Wyboo Plantation Block D County: Clarendon  
Extension and Block L Water and Sewer  
 II. Project Location (street names, etc.): Wyboo Plantation Lake Arbu Dr., Pine Lake Court  
and Player's Course Drive

III. Project Description(s): Water System: Approximately 1,420 L.F. of 6" water main,  
5,125 L.F. of 3" water main and appurtenances and

Wastewater System: Approximately 8,180 L.F. of 3" septic tank effluent  
force main and 49 residence STEP tanks and pumps and related  
appurtenances

Project Type (A-Z): Water ☒ Wastewater ☐ (See instructions for the appropriate project code)

IV. Initial Owner's Name/Organization/Address/Phone/Fax: (Time of Application) Wyboo Plantation/  
Bill Gregory / 317 Plantation Dr. / Manning, S. C. 29102

V. Final Owner's Name/Organization/Address/Phone/Fax: (After Construction) Same  
 Phone: (803) 478-7888 FAX: (803) 478-7890

VI. Name, Address, Phone of entity responsible for operation & maintenance: (if different from owner)  
Water System: same

Wastewater System: same

VII. Engineering Firm/Address/Phone/Fax/E-mail: William A. Timmons, P.E. /  
P. O. Box 927, Manning, S.C. 29102 (803) 435-4243 FAX: (803) 435-2647

VIII. Is this project: A) part of a phased project? No ☐ Yes ☒ If Yes, Phase I of         
 B) A revision/follow-up to a previously permitted project? No ☒ Yes ☐ If Yes, Permit #         
 Date Approved:        Project Name (if different):         
 C) Submitted based on: Schedule of Compliance or Order issued by DHEC? No ☒ Yes ☐ Order #         
 D) Anticipating funding by the State Revolving Fund (SRF)? No ☒ Yes ☐

IX. Are Standard Specifications approved by DHEC being used on this project? No ☒ Yes ☐ If Yes:

Water: Date Approved:        Approved for whom:       

Wastewater: Date Approved:        Approved for whom:       

### X. Wastewater Systems Only:

A) Wastewater Type: Domestic ☒ Process (Industrial) ☐ Combined (Domestic & Process) ☐  
 B) Total design flow of the project not to exceed 21,400 GPD (Revised 8/26/99 BY WAT)  
 C) Sewers or Pretreatment 1. Name of facility treating the wastewater: Wyboo Plantation  
 2. NPDES/ND Number of facility in Item #1: ND0072427  
Treatment Systems 3. Date Preliminary Engineering Report (PER) approved:         
 4. NPDES/ND application submitted? No ☐ Yes ☐ Date:         
Disposal Sites 5. Effluent Disposal Site (Description): Player's Course Irrigation  
 6. Sludge Disposal Site (Description):       

### XI. Water Systems Only:

Wyboo  
 Public water system providing water: Plantation DHEC System ID #: 1450010  
 New water system? No ☒ Yes ☐ If Yes, System name:

A) Standard Submittal *must* include the following, where applicable:

- ☒ 1. A transmittal letter outlining the submittal package.
  - ☒ 2. The original construction permit application, properly completed with two (2) copies.
  - ☒ 3. Three (3) sets of signed and sealed plans/specs. Specs may be omitted if approved standard specs are on file with DHEC. *Note:* For combined water and wastewater submittals four (4) sets of detailed construction plans are required. One additional plan sheet showing the proposed and existing (in the area of construction) water and wastewater lines (highlighted for identification) and their sizes.
  - ☒ 4. Three (3) sets of the appropriate design calculations. WASTEWATER: Design flow (based on R.61-67, Appendix A) and pump station calculations, pump curve, etc. WATER: Recent flow test from a location near the tie-on site along with a copy of design calculations indicating the pressure maintained in the distribution system during instantaneous demand, during fire flow and flushing velocities achieved. Also, if applicable, the number and types of service connections, the well record form, pumping test results, etc.
  - ☒ 5. Three (3) copies of a detailed 8½" x 11" location map, separate from the plans.
  - ☐ 6. Three (3) copies of construction easements unless the project owner has the right of eminent domain.
  - ☒ 7. A letter(s) from the entity supplying water and/or providing wastewater treatment stating their willingness and ability to serve the project, including pretreatment permits, if applicable. When applicable, the letter should include the specific number of lots being served.
  - ☒ 8. A letter(s) from the entity agreeing to be responsible for the O&M of the water and/or wastewater system.
  - ☒ 9. WASTEWATER SYSTEMS ONLY: Application fee enclosed \$ 350.00 (Refer to R.61-30, Fee Schedule).
- Note:* Other approvals may include 208 and OCRM certification, and navigable waterway permitting.

B) DRP submittal (treatment plants are not covered) *must* include the following, where applicable:

- ☐ 1. A transmittal letter, signed by the professional engineer, noting this is a DRP submittal. The letter should state that the project has been reviewed and complies with R.61-58 and/or R.61-67.
- ☐ 2. The original construction permit application, properly completed, with one (1) copy.
- ☐ 3. Two (2) copies of the signed and sealed plans. One additional plan sheet showing the proposed and existing (in the area of construction) water and wastewater lines (highlighted for identification) and their sizes.
- ☐ 4. Two (2) copies of the appropriate design calculations. WASTEWATER: Design flow (based on R.61-67, Appendix A) and pump station calculations, pump curve, etc. WATER: Recent flow test from a location near the tie-on site along with a copy of design calculations indicating the pressure maintained in the distribution system during instantaneous demand, during fire flow and flushing velocities achieved. Also, if applicable, the number and types of service connections, the well record form, pumping test results, etc.
- ☐ 5. Two (2) copies of a detailed 8½" x 11" location map, separate from the plans.
- ☐ 6. Two (2) copies of construction easements, unless the project owner has the right of eminent domain.
- ☐ 7. DHEC's Ocean and Coastal Resource Management certification (for projects in applicable counties).
- ☐ 8. DHEC's Water Quality Division permit for placement in navigable waters, and other Agency approvals.
- ☐ 9. Wastewater Systems Only:
  - a) Letter of acceptance from the entity providing the treatment of the wastewater that, when applicable, includes the specific number of lots and flow being accepted.
  - b) Letter from the organization agreeing to be responsible for the O&M of the sewer system.
  - c) The 208 Plan certification from the appropriate Council of Governments (designated 208 areas), or from DHEC on the non-designated 208 areas.
  - d) Application Fee of \$75 for a collection/transmission system submitted as a DRP project.

*Note:* The DRP entity should ensure that a copy of the final approved plans are being returned to the design engineer.

XIII. Construction plans, material and construction specifications, the engineering report including supporting design data and calculations are herewith submitted and made a part of this application. I have placed my signature and seal on the engineering documents submitted, signifying that I accept responsibility for the design of this system, and that I have submitted a complete administrative package.

Engineer's Name (Printed): William A. Timmons

Signature: 

09429

Registered Professional Engineer

S.C. Registration Number:

XIV. Prior to final approval, I will submit a statement certifying that construction is complete and in accordance with the approved plans and specifications, to the best of my knowledge, information and belief. This certification will be based upon periodic observations of construction and a final inspection for design compliance by me or a representative of this office who is under my supervision.

Engineer's Name (Printed): William A. Timmons

Signature: 

09429

Registered Professional Engineer

S.C. Registration Number:

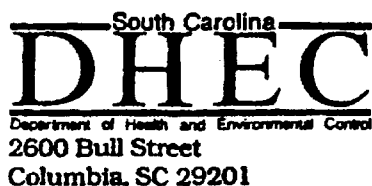
XV. I hereby make application for a permit to construct the project as described above. I have read this application and agree to the requirements and conditions and agree to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

Owner's Name (Printed): W. T. Gregory

Signature: 

Owner's Title: Vice President

Date:



## Bureau of Water Pollution Control Permit To Construct

Permission is hereby granted to: Wyboo Plantation  
Route 4, Box 693  
Manning, SC 29102

For the construction of a sanitary sewer system in accordance with the construction plans, specifications, engineering report and Construction Permit Application signed by Larry M. Smith, Registered Professional Engineer, S.C. Registration Number: 11687.

**Project Name:** Wyboo Plantation - Tile Field

**County:** Clarendon

**Project Description:** Construction of approximately 3,534 LF of sewer tile field, 37 septic and pump tanks, 457 LF of 2" force main, 496 LF of 2 1/2" force main and 1,347 LF of 3" force main and appurtenances to serve 37 residential lots.

The effluent will be discharged to the Tile Field at a daily rate not to exceed 14,800 gallons per day.

The effluent concentrations of those constituents the wastewater treatment system is designed to remove or reduce are contained in ND Permit ND0072427.

**Treatment Plant Classification:** I

**Special Conditions:**

1. The rated capacity of the new pump stations at each lot is 20 gpm @ 43.6 TDH.
2. The design of the tile field must be according to DHEC's letter dated July 1, 1993.
3. This is Phase I (tile field only) of a residential development build-out of 550 lots. In the future, a WWTP will be constructed for Wyboo Plantation.

**Permit Number:** 18,775-DW

**Date of Issue:** October 20, 1993


**Expiration Dates:** Unless construction begins prior to  
and construction is completed prior to  
this permit will expire.

October 20, 1995

October 19, 1996

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

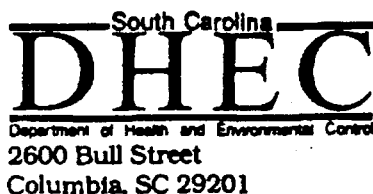
**THIS IS A PERMIT FOR CONSTRUCTION ONLY AND DOES NOT CONSTITUTE STATE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL APPROVAL, TEMPORARY OR OTHERWISE, TO PLACE THIS SYSTEM IN OPERATION.**

  
Jeffrey P. deBessonnet, P.E., Director  
Domestic Wastewater Division

  
T/S/mfp



WW 634-14



## Bureau of Water Pollution Control Permit To Construct

Permission is hereby granted to: William T. Gregory  
Wyboo Plantation  
Route 4, Box 693  
Manning, SC 29102

for the construction of a sanitary sewer system in accordance with the construction plans, specifications, engineering report and the Construction Permit Application signed by Kevin F. Strickland, Registered Professional Engineer, S.C. Registration Number: 15573.

**Project Name: WYBOO PLANTATION FORCE MAIN EXTENSION**

**County: Clarendon**

**Project Description:** 3,238 LF of 3" force main and 17 septic tank effluent pump (STEP) units to serve 17 residential lots.

The wastewater will be discharged to the WYBOO PLANTATION/PHASE II treatment facility at a design flow rate of 6800 gallons per day.

The effluent concentrations of those constituents the wastewater treatment system is designed to remove or reduce are contained in ND Permit ND0072427.

**Special Conditions - (See Back of Construction Permit for Continuation):**

1. Before any connection can be made to this system, Wyboo Plantation and the property owner must enter into a written agreement which must establish :
  - a. The service line from the house to the solids interceptor tank will be owned and maintained by the property owner.
  - b. The solids interceptor tank and all parts of the system following it will be owned and maintained by Wyboo Plantation.

**Permit Number: 20,955-DW**

**Date of Issue: April 19, 1996**

**Expiration Dates:** Unless construction begins prior to April 19, 1998 and construction is completed prior to April 19, 1999 this permit will expire.

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

**THIS IS A PERMIT FOR CONSTRUCTION ONLY AND DOES NOT CONSTITUTE STATE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL APPROVAL, TEMPORARY OR OTHERWISE, TO PLACE THE SYSTEM IN OPERATION.**

Jeffrey P. deBessonnet, P.E., Director  
Domestic Wastewater Division

2014/19/96

WW 755-16

**Special Conditions for Construction Permit Number: 20,955-DW**  
**Date of Issue: April 19, 1996**

- c. Wyboo Plantation will be responsible for the operation, maintenance, and replacement of all system components beginning with the solids interceptor tanks and pumping systems. Wyboo Plantation is required to inspect each solids interceptor tank at least once per year and to ensure that the solids from the solids interceptor tank are pumped and hauled by a Department approved septage hauler and transported to a DHEC approved wastewater treatment facility for final disposal.
2. No agreement between Wyboo Plantation and the property owner shall relieve Wyboo Plantation of obligation to the Department to maintain all parts of the system except the service line.
3. The wording of the standard service agreement between the property owner and Wyboo Plantation must be approved by the Department and must specifically include ensuring the utility has the right to take any actions necessary to maintain the entire system including but not limited to access to customers' property.
4. Before connecting any property owner to the system, Wyboo Plantation must establish that it has perpetual easements necessary to maintain the system and that both parties, their heirs, transfers and assigns agree to abide by these conditions.
5. PVC force main must be installed in accordance with ASTM D-2321 or ASTM D-2774, latest revision.
6. Ductile iron force main must be in conformance with ASTM A-377, latest revision.
7. A minimum cover of 3 feet is required over all the force main unless using ductile iron pipe.
8. An audible and visible high water alarm must be installed on the control panel of each STEP unit.

# Wastewater Construction Permit

## Bureau of Water



Permission is hereby granted to: Bill Gregory  
Wyboo Plantation  
317 Plantation Dr  
Manning, SC 29102

for the construction of a sanitary sewer system in accordance with the construction plans, specifications, engineering report and the Construction Permit Application signed by Gary M. Hubbard, Registered Professional Engineer, S.C. Registration Number: 11121.

**Project Name:** WYBOO PLANT. LAKE ARBU & RIDGE LAKE DR **County:** Clarendon  
**Location:** Wyboo Plantation Lake Arbu & Ridge Lake Drive

**Project Description:** Approximately 4,815 LF of 3" force main and 51 septic tank effluent pump (STEP) systems to serve 51 residential lots.

The wastewater will be discharged to the WYBOO PLANTATION/PHASE II treatment facility at a design flow rate of 20400 gallons per day.

The effluent concentrations of those constituents the wastewater treatment system is designed to remove or reduce are contained in ND Permit ND0072427.

**Special Conditions - (See Back of Construction Permit for Continuation):**

1. Sewer force mains in relation to water mains must be in accordance with Regulation 61-67.
2. PVC force main must be installed in accordance with ASTM D-2321, latest revision.
3. Wyboo Plantation must be responsible for the operation, maintenance, and replacement of all system components beginning with the solids interceptor tanks.

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

*This is a permit for construction only and does not constitute State Department of Health and Environmental Control approval, temporary or otherwise, to place the system in operation. A Permit to Operate is required and can be obtained following the completion of construction by contacting the EOC Wateree District Office at (803) 778-1531. Additional permits may be required prior to construction (e.g., stormwater).*

**Permit Number:** 22,954-WW  
**Date of Issue:** April 23, 1998  
**Expiration Date:** Construction must begin prior to April 22, 2000 and be completed prior to April 22, 2001, or this permit will expire.

  
Jeffrey P. deBessonnet, P.E., Director  
Water Facilities Permitting Division

GBA



**Special Conditions for Construction Permit Number: 22,954-WW**  
**Date of Issue: April 23, 1998**

4. No agreement between the utility and the property owner shall relieve the utility of obligation to SCDHEC to maintain all parts of the system except the service line.
5. Wyboo Plantation must have the right of ingress/egress on each lot to be able to maintain the solids interceptor tanks and pumping systems.
6. Wyboo Plantation must establish that it has perpetual easements necessary to maintain the system and that both parties, their heirs, transfers and assigns agree to abide by these conditions.
7. The septage from the solids interceptor tanks must be disposed of at the City of Manning WWTP (NPDES Permit #SC0020419).

# Wastewater Construction Permit

## Bureau of Water



Permission is hereby granted to: Bill Gregory  
Wyboo Plantation  
317 Plantation Dr  
Manning, SC 29102

for the construction of a sanitary sewer system in accordance with the construction plans, specificat engineering report and the Construction Permit Application signed by William A. Timmons, Registered Professional Engineer, S.C. Registration Number: 9429.

Project Name: WYBOO PLANTATION BLOCKS I, J, K County: Clarendon  
Location: Wyboo Plant., Lk Arbu Dr, Fairway Dr & Oakview Cr

Project Description: 5088 linear feet of 3" force main and 57 residential STEP tanks and pumps.

The wastewater will be discharged to the WYBOO PLANTATION/PHASE II treatment facility at a design flow rate of 22800 gallons per day.

The effluent concentrations of those constituents the wastewater treatment system is designed to remove or reduce are contained in ND Permit NDO072427.

### Special Conditions - (See Back of Construction Permit for Continuation):

1. Wyboo plantation must be responsible for the operation, maintenance, and replacement of system components beginning with the solids inerceptor tanks.
2. No agreement between the utility and the property owner shall relieve utility of obligation to maintain all parts of the system except service line.
3. Wyboo Plantation must have the right of ingress/egress on each lot to be able to maintain the solids interceptor tanks and pump systems.
4. The septage from the solids interceptor tanks must be disposed of at the City of Manning WWTP (NPDES Permit #SC0020419).

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

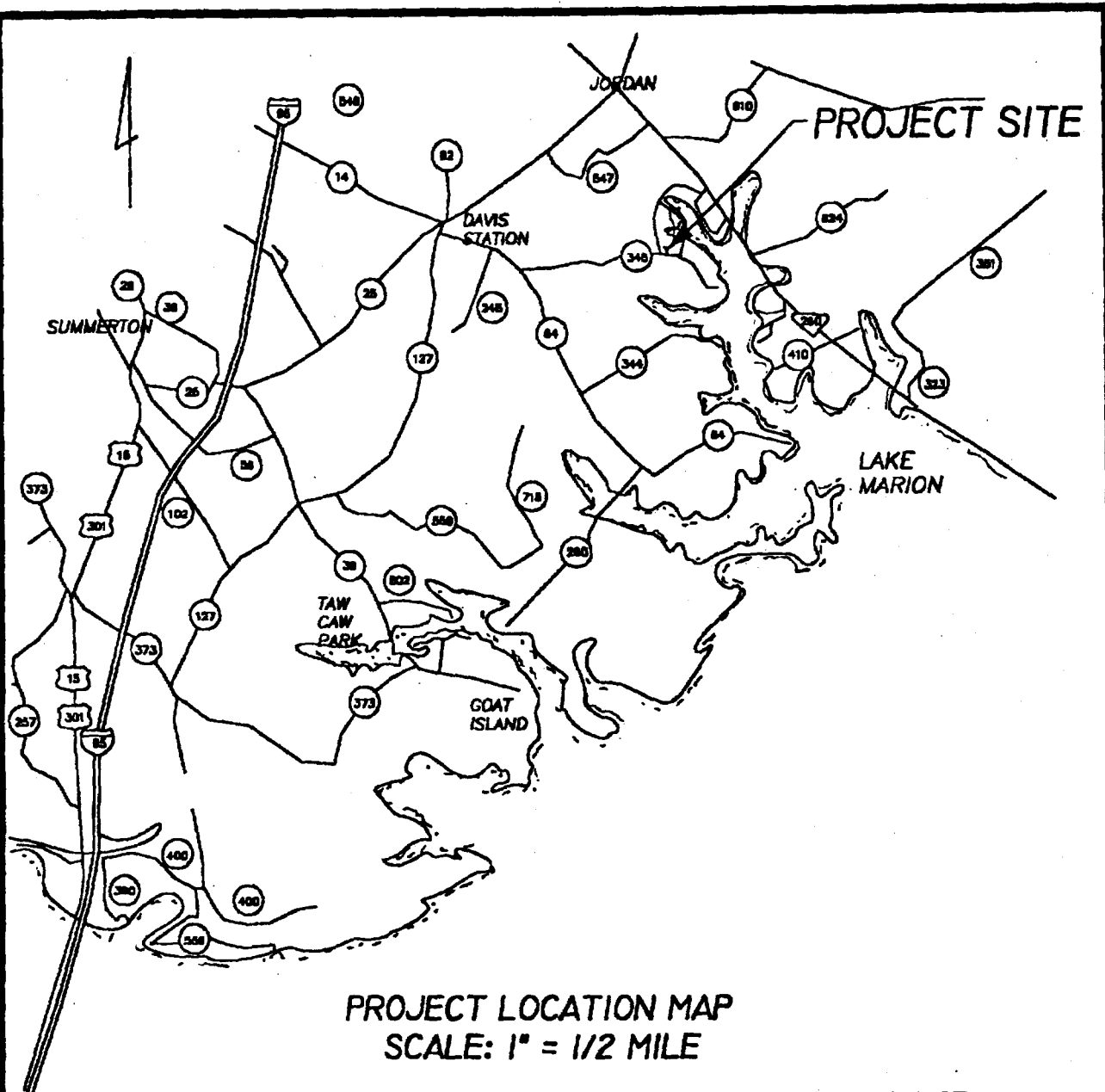
*This is a permit for construction only and does not constitute State Department of Health and Environmental Control approval, temporary or otherwise, to place the system in operation. A Permit to Operate is required and can be obtained following the completion of construction by contacting the EQC Wateree District Office at (803) 778-1531. Additional permits may be required prior to construction (e.g., stormwater).*

Permit Number: 22,963-WW  
Date of Issue: April 28, 1998  
Expiration Date: Construction must begin prior to April 27, 2000 and be completed prior to April 27, 2001, or this permit will expire.

  
Jeffrey P. deBessonet, P.E., Director  
Water Facilities Permitting Division

RJR

MAY 05 1998



**FAIRWAY DRIVE, OAK VIEW CIRCLE  
BLOCKS I, J AND K  
WYBOO PLANTATION**

**LAKE MARION - CLARENDON COUNTY, S.C.**

**TIMMONS ENGINEERING**  
16-C N. BROOKS STREET  
MARBLE, SOUTH CAROLINA 29102



2600 Bull Street  
Columbia, SC 29201-1708

COMMISSIONER:  
Douglas E. Bryant

March 25, 1998

BOARD:  
John H. Burriass  
Chairman

William M. Hull, Jr., MD  
Vice Chairman

Roger Leaks, Jr.  
Secretary

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Cyndi C. Mosteller

Brian K. Smith

Rodney L. Grandy

Mr. Gary Hubbard  
Hubbard Engineering Associates  
3955 Leaphart Road, Suite 1A  
W. Columbia, SC 29169

**RE: Wyboo Plantation Lake Arbu and Ridge Lake Drives Sewer Extensions  
Clarendon County**

Dear Mr. Hubbard:

This Department has completed a preliminary review of the above referenced project submitted on March 6, 1998. However, the following items are required before our review can continue:

1. Section X.B of the application must be completed.
2. Will the individual STEP units be constructed as part of this project? If not, then a separate construction permit will be required for each connection. If the STEP units will be included as part of this project, then the following items are required:
  - a. Flow calculations in accordance with Appendix A of R. 61-67 must be submitted.
  - b. The STEP units must be included in the project description of the application.
  - c. A revised letter from Wyboo Plantation agreeing to be responsible for the operation, maintenance, and replacement of all system components beginning with the solids interceptor tanks and pumping systems as well as agreeing to accept and treat the wastewater from this project must be submitted.
  - d. Wyboo Plantation must have the right of ingress/egress on each lot to be able to maintain the solids interceptor tanks and pumping systems.
  - e. Wyboo Plantation must establish that it has perpetual easements necessary to maintain the system and that both parties, their heirs, transfers and assigns agree to abide by these conditions.
  - f. Wyboo Plantation must inspect the tanks as needed for proper operation and maintenance, but at least on a yearly basis, and must pump the solids from the tanks and haul them to an approved destination, as required.



3/6/98

S.C. DHEC  
2600 Bull Street  
Columbia, S.C. 29201

Re: Sewer Extensions

Dear Sir:

Wyboo Plantation will own and agrees to operate, maintain and provide treatment for sewer extensions to serve Blocks G, H, & I on Lake Arbu and Ridge Lake Drives.

In addition all necessary easements will be provided.

Sincerely,

  
W.T. Gregory

**RECEIVED**

MAR 6 1998

WATER FACILITIES  
PERMITTING DIVISION

Design Calculations for Wyboo Plantation  
1998 Existing and Proposed Septic Tank Effluent Piping System  
3/4/98  
ND Permit: ND0072427

A. General:

Wyboo Plantation in Clarendon County currently operates a 184,000 gpd Wastewater Treatment Facility. Sewer collection is through a STEP (septic tank effluent pumping system). Piping improvements are planned for existing and proposed lots to be developed through 1998. There are approximately 54 existing services tapped on to the system and a 100 seat restaurant. The 100 seat restaurant is calculated as 20 400 gpd taps. Current piping and planned 1998 expansions will allow eventual service to approximately 245 taps which is expected growth for next 5-10 years.

B. Treatment Plant Capacity:

Existing treatment capacity is 184,000 gpd. Discharge capacity on the Player's Course golf course is in excess of 900,000 gpd. Limiting capacity is treatment.

Treatment Capacity:	184000 gpd
Capacity Reserved for Santee Cooper's Use:	50000
Net Capacity available:	134000 gpd
At 400 gpd/tap, Taps available:	335 taps

C. STEP System Capacity:

The STEP system is composed of 1000 gallon solids capture tanks that feed into a 500 gallon STEP pump tank and 1 HP pump at each residence. Pump curve is attached showing operating range from shutoff head at 76' to 20 gpm at 62' to 100 gpm at 18' TDH. At a design flow of 20 gpm pump floats are set for 0.5 foot (75 gallon) operating range giving 15 minute min. cycle time (from previous system design data). 39"X79" pump tank has 160 gal/ft capacity. The 500 gallon pump tank gives approximately 1 day of storage to prevent problems during power failure, peak flows, equipment failure, etc. A high level alarm light is powered separately from pump to indicate problems.

A spreadsheet hydraulic model of the system was prepared. See attached map.

Calculations following show minimum velocity of 1 fps with only one pump running at remote nodes. Calculations with 5-6 pumps show flow ranges from 150-200 gpm and no pumps at shutoff. Flow calculations show peak flows, not considering STEP tank storage, of 170.1 gpm system wide and local peaks of 5-31 gpm, again not considering STEP tank storage. STEP piping system calculations indicate no problem in transporting proposed 1998 piping system buildout flows.

Wyboo Plantation maintains the STEP system from the solids tank inlet through the STEP tank and mains to and including the wastewater treatment and reuse facilities.

**RECEIVED**

MAR 6 1998

WATER FACILITIES  
PERMITTING DIVISION

*Gay M. Hubbard*



April 21, 1998

SCDHEC  
2600 Bull Street  
Columbia, S.C. 29201

Attn: Bridget M. Clarke

Re: Wyboo Plantation STEP Sewer System  
Wyboo Plantation Development  
ND Permit # ND0072427

RECEIVED  
APR 22 1998  
WATER FACILITIES  
PERMITTING DIVISION

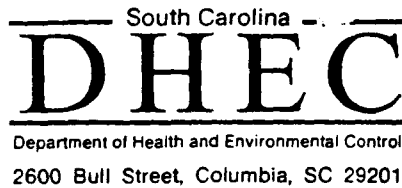
Dear Mrs. Clarke:

This is to advise the following:

- Wyboo Plantation owns and operates its Septic Tank Effluent Pumping and sewage treatment system under the name of Wyboo Utilities, Inc.
- Wyboo Utilities, Inc. is responsible for the operation and maintenance and replacement of all system components of the Septic Tank Effluent Pumping and treatment system and pumping systems through the treatment and effluent disposal system.
- Wyboo Utilities, Inc. agrees to accept and treat the wastewater from the Lake Arbu and Ridge Lake Drives Sewer Extensions and from the Blocks I, J and K sewer systems.
- Wyboo Plantation has the right of ingress and egress on each lot to be able to maintain the pumping systems. This right is through perpetual easements as shown on recorded plats of lots that binds the property owner and Wyboo Utilities, Inc, their heirs, transfers and assigns to the agreed access.
- Wyboo Utilities, Inc. inspects the pumping systems as needed for proper operation and maintenance a minimum of once annually.
- Wyboo Utilities contracts with Independent Licensed Contractors to pump and dispose of solids. Attached is copy of letter from City of Manning assuring acceptance of sewer.

Sincerely,

William T. Gregory



Commissioner: Douglas E. Bryant

Board: John H. Burriss, Chairman  
William M. Hull, Jr., MD, Vice Chairman  
Roger Leaks, Jr., Secretary

*Promoting Health, Protecting the Environment*

Richard E. Jabbour, DDS  
Cyndi C. Mosteller  
Brian K. Smith  
Rodney L. Grandy

March 14, 1996

Mr. Kevin Strickland  
Hubbard Engineering Associates  
175 Rich-Lex Drive  
Lexington, South Carolina 29072

**RE: Wyboo Plantation Force Main Extension  
Clarendon County**

Dear Mr. Strickland:

This Department has completed a preliminary review of the above referenced project submitted on February 29, 1996. However, the following items are required before our review can continue:

1. What type of sewer system are you proposing? If an alternative sewer system is being proposed, then **all** the items under **Alternative Collection systems for Residential Development** listed on pages 26 and 27 of the enclosed **Proposed Regulation 61-67** are required along with the following items:
  - a. A \$350.00 application fee is required for sewer systems including pump stations. Therefore, a balance of \$150.00 is required.
  - b. If individual STEP units or grinder pump stations are being proposed to serve the lots, then they must be included as part of this project. Otherwise, an individual permit and \$350.00 application fee will be required for each unit or pump station. A detail drawing of the units or pump stations must be submitted.
  - c. A letter must be submitted from Wyboo Plantation agreeing to be responsible for operation, maintenance and replacement of all system components beginning with the solids interceptor tanks and pumping systems.
  - d. Justification must be provided for the need of an alternative sewer collection system in lieu of a conventional gravity system.

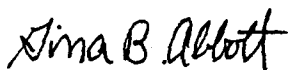


Mr. Strickland  
March 14, 1996  
Page 2 of 2

- e. Wyboo Plantation must have the right of ingress/egress on each lot to be able to maintain the solids interceptor tank and pumping systems. A copy of a homeowners agreement must be submitted.
- f. Ultimate sludge disposal must be addressed.
- g. Design calculations must be submitted showing the velocity in the lines to be a minimum of one (1) foot/sec, for lines conveying effluent only from the tanks, or a minimum of two (2) feet/sec, for lines conveying raw sewage.

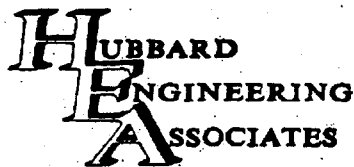
If you have any questions, please do not hesitate to contact this office.

Sincerely,



Gina B. Abbott  
Construction Management Section  
Domestic Wastewater Division  
Bureau of Water Pollution Control

cc: Ronnie Rentz, EQC District Director



Consulting Engineers / Surveyors  
175 Rich-Lex Drive + Lexington, SC 29072  
(803) 796-0900 FAX (803) 796-0999

April 17, 1996

RECEIVED

Ms. Gina Abbott  
Bureau of Water Pollution Control  
S.C. Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, SC 29201

APR 19 1996

Office of Environmental  
Quality Control Domestic  
Wastewater Division

RE: Wyboo Plantation Force Main  
Extension - Clarendon County  
File No. 96006

Dear Ms. Abbott:

In response to your letter of April 12, 1996 regarding the referenced project, I offer the following responses:

1. Please see enclosed revised application for Permit to Construct.
2. Each individual STEP unit will be pumped by a DHEC licensed sewage truck and hauled to a DHEC licensed treatment facility.

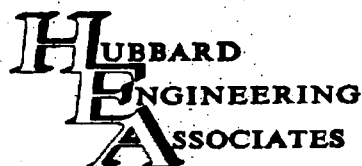
Please contact this office if there are any further concerns.

Sincerely,

HUBBARD ENGINEERING ASSOCIATES

A handwritten signature in cursive script that reads 'Dana C. Rogerson'.  
Dana C. Rogerson  
Project Engineer

Enclosures



Consulting Engineers / Surveyors  
175 Rich-Lex Drive \* Lexington, SC 29072  
(803) 796-0900 FAX (803) 796-0999

RECEIVED

April 11, 1996

APR 12 1996

Ms. Gina Abbott  
Bureau of Water Pollution Control  
S.C. Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, SC 29201

Office of Environmental  
Quality Control Domestic  
Wastewater Division

RE: Wyboo Plantation Force Main  
Extension - Clarendon County  
File No. 96006

Dear Ms. Abbott:

In response to the letter sent on March 14, 1996 regarding the referenced project, I offer the following responses:

- 1a. A check for the additional \$150.00 is included.
- 1b. Each individual STEP unit has been added to the project and a detail drawing is included on sheet 4 of the construction plans.
- 1c. A letter from Wyboo Plantation is included.
- 1d. An alternative sewer collection system was designed because the project is limited by topography since it is located by a lake. It is also cheaper than a conventional gravity system.
- 1e. A letter from Wyboo Plantation regarding the right of ingress/egress on each lot to be able to maintain the solids interceptor tank and pumping system is included.
- 1f. The sludge will be pumped by a sewage truck and hauled to a treatment plant.
- 1g. I have included two printouts of the force main model, one with all pumps running and one with one pump running. The simulation with all pumps running has some check valves closing in some of the lines. This is due to the high head of the system when all pumps are running. One pump running will pump 67.5 gpm, which is well over the 22.5 gpm required to provide a velocity of 1 ft/sec. When only one pump is running, the run time of the pump (pump station drawdown) is approximately 2.5 minutes.

Please contact this office if there are any further concerns.

Sincerely,

HUBBARD ENGINEERING ASSOCIATES

A handwritten signature in cursive script that reads 'Dana C. Rogerson'.

Dana C. Rogerson  
Project Engineer

Enclosures

# Wyboo

PLANTATION

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Route 4, Box 693, Manning, SC 29102

Administration (803) 478-7889 • Fax (803) 478-7890 • Sales (803) 478-7888

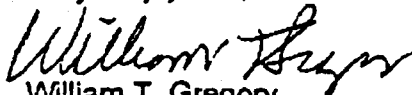
April 10, 1996

Ms. Gina Abbott  
Bureau of Water Pollution Control  
SCDHEC  
2600 Bull St.  
Columbia, SC 29201

Dear Ms. Abbott:

Wyboo Plantation as owners and operators of a S.T.E.P. Low Pressure Sewer System, has the irrevocable right to enter all appropriate lots as recorded on plats with Clarendon County Clerk of Court for the purpose of installation, maintenance, repair and removal of this system.

Very truly yours,

  
William T. Gregory  
Executive Vice President

WTG:dea

cc: Hubbard Engineering

# Wyboo

PLANTATION

---

Route 4, Box 693, Manning, SC 29102

Administration (803) 478-7889 • Fax (803) 478-7890 • Sales (803) 478-7888

February 15, 1996

Mr. Wayne Stokes  
Domestic Wastewater Division  
S.C. Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, SC 29201

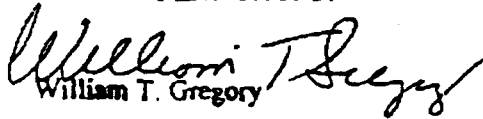
Dear Mr. Stokes:

Wyboo Plantation will own, operate and maintain the proposed sewer lines.

Should you need anything further, please give me a call.

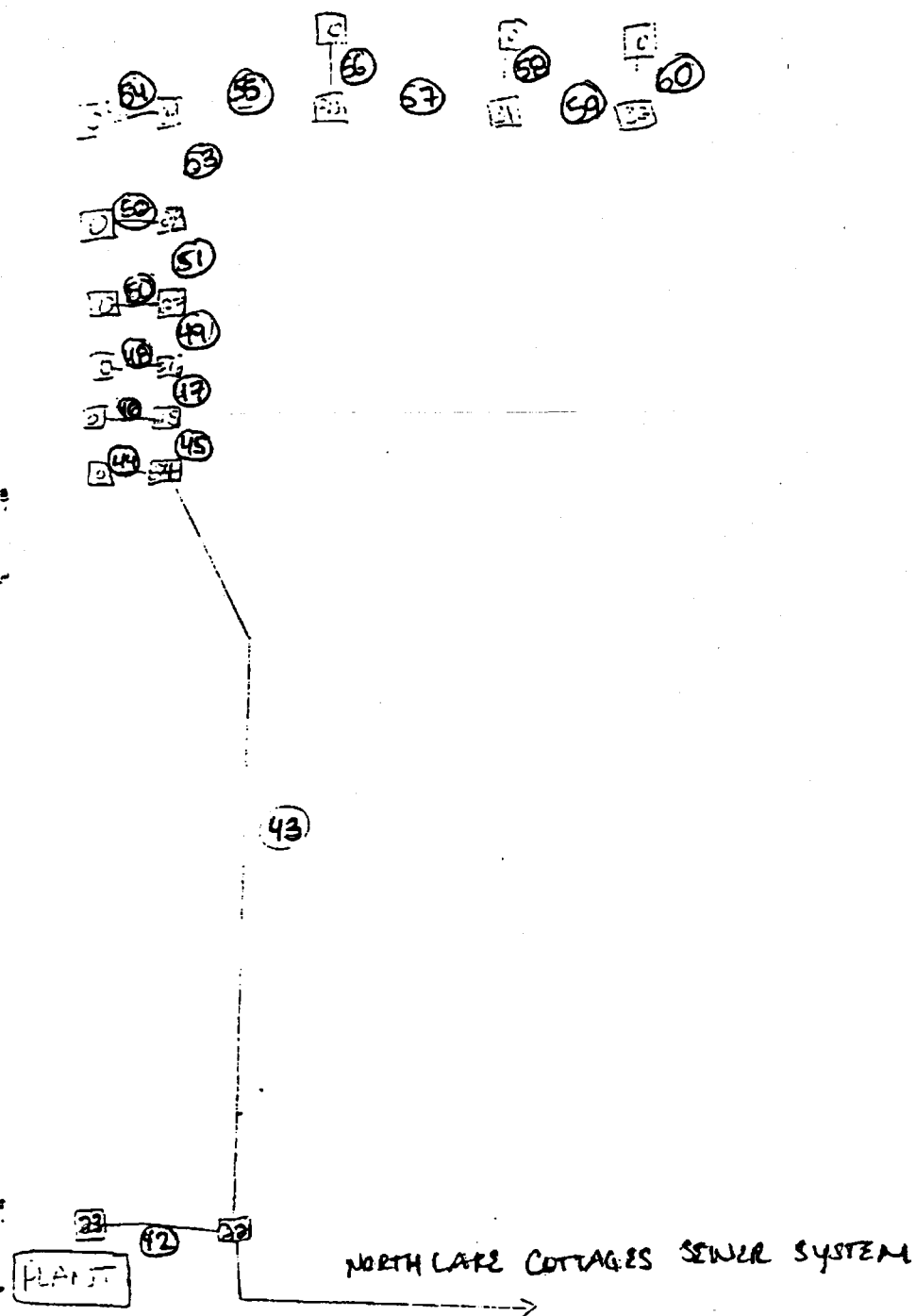
Sincerely,

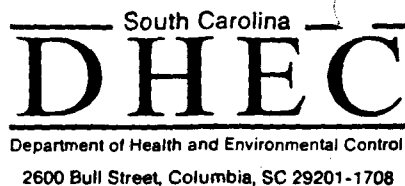
WYBOO PLANTATION

  
William T. Gregory

□ - NODE

O. P. DE





Commissioner: Douglas E. Bryant

Board: John H. Burriss, Chairman  
William M. Hull, Jr., MD, Vice Chairman  
Roger Leaks, Jr., Secretary

*Promoting Health, Protecting the Environment*

Richard E. Jabbour, DDS  
Cyndi C. Mosteller  
Brian K. Smith  
Rodney L. Grandy

April 12, 1996

Mr. Kevin Strickland  
Hubbard Engineering Associates  
175 Rich-Lex Drive  
Lexington, South Carolina 29072

**RE: Wyboo Plantation Force Main Extension  
Clarendon County**

Dear Mr. Strickland:

This Department has received and reviewed your revisions for the above referenced project. However, the following items are required before our review can continue:

1. Section III of the enclosed application must be revised to include the 17 STEP units.
2. A letter of acceptance from the treatment facility where the sludge will be disposed must be submitted.

If you have any questions, please do not hesitate to contact this office.

Sincerely,

Gina B. Abbott  
Construction Management Section  
Domestic Wastewater Division  
Bureau of Water Pollution Control

cc: Ronnie Rentz, EQC District Director

# Wastewater Construction Permit

## Bureau of Water



Permission is hereby granted to: Wyboo Plantation  
317 Plantation Dr  
Manning, SC 29102

for the construction of a sanitary sewer system in accordance with the construction plans, specification: engineering report and the Construction Permit Application signed by Richard B. Burns, Jr., Registered Professional Engineer, S.C. Registration Number: 13220.

**Project Name:** MILL CREEK SUBDIVISION **County:** Clarendon  
**Location:** WHITE OAK II DR. 900' NW OF WHITE OAK III DR.

**Project Description:** 1985 linear feet of 8" gravity sewer line, 3500 linear feet of 4" force main, 6 manholes and a pump station to serve 40 lots.

The wastewater will be discharged to the WYBOO PLANTATION/PHASE II treatment facility at a design flow rate of 16000 gallons per day.

The effluent concentrations of those constituents the wastewater treatment system is designed to remove or reduce are contained in ND Permit ND0072427.

### Special Conditions:

1. All construction/materials for this project must conform to the Standard Specifications for RICHARD B. BURNS, JR. approved on 03/10/93.

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

*This is a permit for construction only and does not constitute State Department of Health and Environmental Control approval, temporary or otherwise, to place the system in operation. A Permit to Operate is required and can be obtained following the completion of construction by contacting the EQC Wateree District Office at (803) 778-1531. Additional permits may be required prior to construction (e.g., stormwater).*

**Permit Number:** 21,982-WW  
**Date of Issue:** May 13, 1997  
**Expiration Date:** Construction must begin prior to May 13, 1999 and be completed prior to May 12, 2000, or this permit will expire.

Jeffrey P. deBessonnet, P.E., Director  
Water Facilities Permitting Division

JR





# Wastewater Construction Permit

## Bureau of Water

Permission is hereby granted to: Wyboo Utilities, Inc.  
317 Plantation Drive  
Manning, SC 29102

for the construction of a sanitary sewer system in accordance with the construction plans, specifications, engineering report and the Construction Permit Application signed by William A. Timmons, Registered Professional Engineer, S.C. Registration Number: 9429.

**Project Name: WYBOO UTILITIES, INC.**  
**Location: Players Course Drive**

**County: Clarendon**

**Project Description:** 3,050 LF of 3" force main, 2,235 LF of 4" force main, 6,500 LF of 4" force main and 105 septic tank effluent pump (STEP) systems to serve a retirement community consisting of 105 residences.

The wastewater will be discharged to the WYBOO PLANTATION/PHASE II treatment facility, (ND Permit ND0072427) at a design flow rate of 31500 gallons per day.

### Special Conditions:

1. A minimum cover of three (3) feet is required over all the force mains, unless using ductile iron pipe.
2. Ductile iron force main must be in accordance with ASTM A-377, latest revision.
3. PVC force main must be in accordance with ASTM D-2241, latest revision.
4. PVC force main must be installed in accordance with ASTM D-2321 or ASTM D-2774, latest revision.
5. Sewer force mains in relation to water mains must comply with R. 61-67.

In accepting this permit, the owner agrees to the admission of properly authorized persons at all reasonable hours for the purpose of sampling and inspection.

*This is a permit for construction only and does not constitute State Department of Health and Environmental Control approval, temporary or otherwise, to place the system in operation. An Approval to Place in Operation is required and can be obtained following the completion of construction by contacting the EQC Wateree District Office at (803) 778-1531. Additional permits may be required prior to construction (e.g., stormwater).*

**Permit Number: 26,170-WW**  
**Date of Issue: December 20, 2000**  
**Expiration Date:** Construction must begin prior to December 21, 2002 and be completed prior to December 20, 2003, or this permit will expire.

  
Jeffrey P. deBessonnet, P.E., Director  
Water Facilities Permitting Division



June 17, 2002

2600 Bull Street  
Columbia, SC 29201-1708

COMMISSIONER:  
C. Earl Hunter

BOARD:  
Bradford W. Wyche  
Chairman

Mark B. Kent  
Vice Chairman

Howard L. Brilliant, MD  
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Larry R. Chewning, Jr., DMD

Mr. Mario R. Odorico  
113 Oak View Circle  
Manning, SC 29102

RE: Your letter of June 4, 2002  
Wyboo Sewer System  
ND0072427

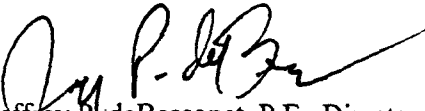
Dear Mr. Odorico:

Apparently, the tanks installed did not include certain features on the plans approved by DHEC. The details of this discrepancy are not listed in our regulations. Rather, it was an engineering design that we did approve. It is my understanding that on the initial tank (solids tank), an inspection pipe should have been installed and was not. As well, there was an inspection feature to the tank housing the pump unit that was not installed. See enclosure for a typical design that was approved. These issues are not issues of rules that have changed. Rather it appears to be an issue of the construction not being consistent with the approved plans.

Regarding hiring your own contractor, it may make a difference as to whether or not you own the tank system. At least one phase of development was required to be owned by Wyboo Utilities (though later phases envisioned the tanks owned by the individual homeowner, but operation and maintenance ultimately being the responsibility of the Utility). As to charges if the Utility were to do the work, you would need to consult with the S.C. Public Service Commission since that state agency regulates rates and related issues.

Regarding sampling data for the drinking water system, Bruce Bleau of this office will respond separately to you.

Sincerely,

  
Jeffrey P. deBessonnet, P.E., Director  
Water Facilities Permitting Division

cc: Jack Pettit, Wateree EQC District  
Bruce Bleau



2600 Bull Street  
Columbia, SC 29201-1708

COMMISSIONER:  
C. Earl Hunter

BOARD:  
Bradford W. Wyche  
Chairman

Mark B. Kent  
Vice Chairman

Howard L. Brilliant, MD  
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Larry R. Chewning, Jr., DMD

June 12, 2002

Mr. James F. McBride  
95 Ridge Lake Drive  
Manning, SC 29102

RE: Your letter of June 4, 2002  
Sewer tanks (Wyboo Plantation), Clarendon County  
ND0072427

Dear Mr. McBride:


Thank you for your letter. Enclosed is a copy of the design approved for this system (I understand that though several different permits were issued to address several phases that this design is typical). When the system was built, initially the sewer line work was done and the sewer lines were approved to be placed into operation.

We would expect the tanks to be the way we permitted them. As to how a correction would be implemented, DHEC would not dictate the specific method (i.e., the utility doing it verses the homeowner doing it). However, our primary concern would be the inspection feature for the solids tank. It would be suitable to address "concrete riser" feature on the pump tank as problems occur. As to any cost impact charged by the utility, you might discuss that issue with the Public Service Commission since they regulate rates.

With regard to the regulations that govern construction of these systems, the rules don't specify this level of detail. The engineer proposed this design and DHEC was satisfied with it (thereby permitting it). In general, the utility is responsible for the operation and maintenance of the system, starting with these tanks and including the pressure sewers. It appears that with regard to lots served by permit 20,955-DW, these tanks are to be owned by Wyboo Plantation, although we are open to discussing a change. Others may have been set up where Wyboo was responsible (ultimately) for operation and maintenance but not necessarily ownership. Copies of the permits are enclosed. A detail file review may be needed to determine the conditions for different permits issued.

We have not prescribed how the utility is to carry out the operation and maintenance responsibility. The exception is that for one particular permit (20,955-DW), we did specify an annual inspection requirement. Having a place to perform an inspection and perform maintenance on tanks and equipment is desirable. We have not specified a frequency at which the tanks need to be pumped out.

Sincerely,

  
Jeffrey P. deBessonet, P.E., Director  
Water Facilities Permitting Division

cc: Jack Pettit, Wateree EQC District  
Wayne Stokes



August 9, 2002

2600 Bull Street  
Columbia, SC 29201-1708

COMMISSIONER:  
C. Earl Hunter

BOARD:  
Bradford W. Wyche  
Chairman

Mark B. Kent  
Vice Chairman

Howard L. Brilliant, MD  
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Larry R. Chewning, Jr., DMD

Mr. James F. McBride  
95 Ridge Lake Drive  
Manning, SC 29102

RE: Sewer tanks (Wyboo Plantation), Clarendon County  
ND0072427

Dear Mr. McBride:

This letter serves to clarify my letter of June 12, 2002 regarding the tank for the pumping system. The approved plans indicate

*24" x 24" Concrete Riser with Recessed Lid (Precast) where depth requires.*

The question in our recent meeting related to our understanding of the phrase "where depth requires." It is our understanding and expectation that if the 20" x 20" inspection lid would be below grade, given a particular application, that the concrete riser would be installed. Said another way, either the Inspection Lid itself or the Recessed Lid should be visible and useable without having to dig to have access to the pump tank.

Sincerely,

Jeffrey P. deBessonet, P.E., Director  
Water Facilities Permitting Division

cc: Jack Pettit, Wateree EQC District  
Wayne Stokes

Wyboo Plantation Utilities, Inc.  
Examples of Unapproved Charges  
Docket 2006-327-WS

Exhibit WJM-4

	A	B	C	D	E	F
1	Customer Name	Address	Date Charged	Type of Charge	Amount	Bate Stamp No.
2	Watkins, Richard	GR-45	4/28/2006	Cut-off Fee	\$35.00	0101
3						
4	Hill, Sophia	CH-45	7/28/2005	Cut-on Fee	\$35.00	0170
5						
6	Bresky	1099 Millcreek Drive	1/28/2004	DHEC Sewer Fee	\$7.50	0007
7						
8	Diaz, Kristal	CH-30	10/4/2004	Illegal Water Use Fee	\$135.00	0111
9						
10	O'Connor	1154 Creek Side Drive	8/4/2004	Impact Fee	\$200.00	0025
11						
12	Bourassa, Anna Johnson	CH-42	8/28/2006	Reconnection/Connection Fee	\$35.00	0136
13						
14	Carter Construction Co. IV	303 Lake Arbu Drive	10/31/2005	Sewer Tap Fee Overcharge	\$150.00	0012
15						
16	Goebel, James	128 Oakview Circle	9/17/2002	STEP System Repair Fee	\$1,123.68	0169
17						
18	Deercreek Plantation PO	P.O. Box 520	4/28/2006	Water Service for Pool Fee	\$234.00	0145
19						
20	Archdale Homebuilders	101 Plantation Drive	7/6/2004	Water Tap Fee	\$450.00	0001
21						
22	Vanscoy	115 Oak View	8/1/2002	Deposit	\$56.00	0182
23						

**BEFORE**  
**THE PUBLIC SERVICE COMMISSION OF**  
**SOUTH CAROLINA**  
**DOCKET NO. 2006-327-WS**

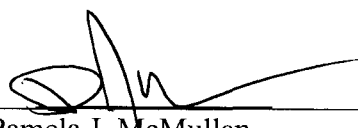
IN RE:

Petition of the Office of Regulatory Staff     )  
Regarding Wyboo Plantation Utilities,        )  
Incorporated's Collection and Charging of     )  
Unauthorized and Unapproved Rates         )

**CERTIFICATE OF SERVICE**

This is to certify that I, Pamela J. McMullan, an employee with the Office of Regulatory Staff, have this date served one (1) copy of the **DIRECT TESTIMONY AND EXHIBITS OF WILLIE J. MORGAN** in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

Mark S. Wrigley, CEO  
Wyboo Plantation Utilities, Incorporated  
Post Office 2099  
Sumter, SC, 29151

  
\_\_\_\_\_  
Pamela J. McMullan

July 31, 2008  
Columbia, South Carolina